ABSTRACT

To provide fine particle films including fine particles which are arranged at a high density in a highly accurate and regular manner is enabled. The fine particle film is a fine particle film including a substrate and plural number of protein fine particles which are arranged on the surface of the substrate in a plane direction parallel to the surface of the substrate, wherein each of the protein fine particles has plural number of first binding sites and one or more second binding sites respectively including a condensed amino acid, and each of the first binding sites binds to other first binding site carried by an adjacent fine particle while the second binding site binds to the substrate, wherein at least a part of the condensed amino acids constituting the second binding site are substituted.